REMARKS

Claim 1-23 are pending. The Official Action dated November 5, 2004 in this Application has been carefully considered. The above amendments and the following remarks are presented in a sincere attempt to place this Application in condition for allowance. Claims 1, 5 and 6 have been amended. Claims 11-21 have been withdrawn from consideration in a previous Response. Thus, Claims 1-10 and 22-23 remain under consideration. Reconsideration and allowance are respectfully requested in light of the above amendments and following remarks.

The Examiner has objected to the specification as assertedly failing to provide a proper antecedent basis for the claimed subject matter. In particularly, the Examiner asserts that there is no basis for the term "located at apexes of a non-oblique triangle in a plane orthogonal to each upwardly extending axis of each of said male conductive terminals."

In response, Claim 1 has been amended to delete the term "located at apexes of a non-oblique triangle in a plane orthogonal to each upwardly extending axis of each of said male conductive terminals," thus obviating this rejection. In its place, Applicants have defined the engageable member as being "positioned so its middle is disposed generally between lines extending axially through said male terminals when viewed from the side but offset to the side of a line extending between said male terminals when viewed from above." This language is clearly supported by Figs. 3, 6 and 8 of the drawings, and in the specification at page 5, lines 19-28, page 7, lines 5-22 and page 7, lines 23-28.

Claims 1-10 and 22-23 have been rejected under 35 U.S.C. §112, first paragraph, for assertedly failing to comply with the written description requirement. In particular, the Examiner contends that the phrase in Claim 1 "each of said sockets configured to receive female conduction connection elements on an electrically isolated plug" lacks original description because no one

socket of two adjacent sockets is disclosed to receive a plug having more than one female connection element and that there is no description for how the plug 204 at Fig. 3 is configured to fit into at least two adjacent sockets.

In response, Claim 1 has been amended to recite "each of said male terminals being at least configured to receive a female conductive connection element on an electrically isolated plug" (emphasis added). This language is clearly supported by the specification and drawings, for example, in Figs. 3-4 and 6-8, and the specification at page 7, lines 11-13. Accordingly, it is respectfully submitted that this rejection has been overcome.

Claim 6 has been rejected under 35 U.S.C. §112, first paragraph, for assertedly failing to comply with the written description requirement. In particular, the Examiner contends that there is no description for "the at least two adjacent sockets . . . to fit different shape plugs" in conjunction with the claim 1 limitation of "configured to engage a locking tab of said electrically isolated plug." The Examiner further contends that applicants appear to have two embodiments – represented by Fig. 3 and Fig. 6, and that the specification does not support a single embodiment that supports insertion of both types of plugs.

It is respectfully submitted that Applicants' specification does support a single embodiment that supports insertion of both types of plugs. The Examiner's attention is respectfully drawn to Fig. 3, which is an "assembled view of a PTCR/OL assembly embodying features of one arrangement of the present invention" and Fig. 8, which is a "top view of a PTCR/OL device of one arrangement of the present invention." The Examiner's attention is also respectfully directed to the fact that the same element numbers (210 and 212) are used in Figs. 3, 4, 6 and 8, to identify the same respective sockets and the same element numbers (220 and 222) are used in Figs. 3, 4, 6 and 8 to identify the

same respective male terminals. Thus, the Examiner's contention that the embodiments depicted in Figs. 3 and 6 are incompatible is not supported by the specification and drawings.

In fact, one advantage of the present invention defined by Claim 1, as now amended, is that the same design can be used in conjunction with a lockable-type electrically isolated plug 204 (as depicted in Fig. 3, for example) and/or nonlocking-type electrically isolated plugs 230 and 230 a, as depicted in Fig. 6. This is further described in the specification at page 5, line 14 to page 6, line 6 (describing use of the invention in conjunction with a lockable-type plug) and page 7, line 23 to page 8, line 5 (describing use of the invention in conjunction with a pair of nonlocking-type plugs).

The Examiner also contends that, as to Claims 22-23, the claim to a wall between the sockets would preclude entry of the plug as depicted. It is respectfully pointed out that Applicant's invention is the PTCR/OL, not plug per se. As Applicant's specification points out, the plug 204 depicted in Fig. 3 is a "commercially available plug" and that "other types of commercially available plugs 204" can be used with the PTCR/OL assembly 200 of the present invention. As is known to persons in the art, some such commercially available dual-connector electrically isolated plugs, in fact, have two interconnected extended "fingers," which would be simultaneously fittable into respective ones of sockets 210 and 212, notwithstanding the wall between the sockets depicted in Fig. 8. Thus, the fact that the embodiments of the present invention defined in Claims 22-23 define a wall disposed in between the two male terminals does not mean that a dual-connector lockable plug cannot be used with the embodiment of the invention depicted in Figs. 3, 4, 6 and 8.

Accordingly, for the reasons stated above, it is respectfully submitted that the Examiner's rejections of Claims 1-10 and 22-23 under 35 U.S.C. 112, first paragraph, have been overcome and withdrawal of such rejections is believed in order and courteously solicited.

Claims 1-5 and 7-10 stand rejected under 35 U.S.C. §103(a) over Admitted Prior Art Fig. 1-2 ("Prior Art") in view of U.S. Patent No. 4,387,412 ("Woods") and either U.S. Patent No. 4,571,017 ("Fujita") or U.S. Patent Application No. 2001/0046803 ("Kodama"). Insofar as they may be applied against the Claims, as amended, these rejections are submitted to be overcome.

Rejected independent Claim 1 as now amended more particularly the distinguishing characteristics of the present invention. In particular, Claim 1 recites that the invention is "adapted for connecting to both nonlocking-type electrically isolated plugs and lockable-type electrically isolated plugs," that "one of said two sockets having an interior cross-sectional size or shape that is different from the interior cross-sectional size or shape of the other socket and at least one of said sockets further being asymmetrical to facilitate connection of a cooperatively-shaped electrically isolated plug in only the proper orientation" and that there is "an engageable member disposed on an upstanding wall of at least one of said sockets and outside of said sockets such that it will not interfere with insertion of a single-conductor electrically isolated plug into either of said sockets, the engageable member further being positioned so its middle is disposed generally between lines extending axially through said male terminals when viewed from the side but offset to the side of a line extending between said male terminals when viewed from above, said engageable member further having a lower edge adapted to lockably engage a locking tab of a lockable electrically isolated plug when a lockable electrically isolated plug is inserted into said sockets." As amended, Claim 1 clearly patentably distinguishes over the prior art.

In Applicants' Admitted Prior Art, depicted in Figs. 1 and 2, the PTCR/OL neither discloses nor suggests any of the foregoing features. Furthermore, these deficiencies in Applicant's Admitted Prior Art are not remedied by any of Woods, Fujita, Kodama or any of the other prior art of record.

Woods discloses a combination starter-protector device. However, Woods does not disclose or suggest any of the foregoing features of Applicants' invention. Thus, even if Woods were to be hypothetically combined with Applicant's Admitted Prior Art, such would neither yield nor suggest the invention defined by Claim 1.

Fujita discloses a generic electrical connector assembly having a first housing 11 that attaches to a second connector 30. However, each of the terminal receiving passageways 12 that receive terminal 13 are the same size and shape, not "different" as defined in Claim 1. Furthermore, the spaces 27 and 28 between the terminals 34 are all of the same size and shape, not "different," as defined in Claim 1. Thus, even if Fujita were to be hypothetically combined with Applicant's Admitted Prior Art, such would neither yield nor suggest the invention defined by Claim 1.

Kodama also discloses a generic connector assembly. However, in Kodama, all of the connector sockets are of the same size and shape, not "different" as defined in Claim 1. Furthermore, all of the connector sockets of Kodama are symmetrical, not "asymmetrical" as defined in Claim 1. Thus, even if Kodama were to be hypothetically combined with Applicant's Admitted Prior Art, such would neither yield nor suggest the invention defined by Claim 1.

Claims 2-5 and 7-10 depend on and further limit Claim 1. Hence, for at least the aforementioned reasons, these Claims are submitted to be in condition for allowance. Applicants respectfully request that the rejections of the dependent Claims 2-5 and 7-10 also be withdrawn.

The Examiner has rejected Claims 1, 6 and 22-23 under 35 U.S.C. §103(a) over Applicants' Admitted Prior Art Fig. 1-2 ("Prior Art") in view of Fujita or EP 06067052 ("Sumida"). Insofar as they may be applied against the Claims, as amended, these rejections are submitted to be overcome.

As pointed out above, Fujita discloses a generic electrical connector assembly having a first housing 11 that attaches to a second connector 30. However, each of the terminal receiving

passageways 12 that receive terminals 13 are the same size and shape, not "different" as defined in Claim 1. Furthermore, the spaces 27 and 28 between the terminals 34 are all of the same size and shape, not "different," as defined in Claim 1. Thus, even if Fujita were to be hypothetically combined with Applicant's Admitted Prior Art, such would neither yield nor suggest the invention defined by Claim 1.

Sumida discloses a waterproof casing. The connectors in Sumida are elements 42a. These connectors 42a are neither disposed in sockets having upstanding walls nor do they form part of an electrically isolated plug. Thus, even if Fujita were to be hypothetically combined with Applicant's Admitted Prior Art, such would neither yield nor suggest the invention defined by Claim 1.

Applicants acknowledge that wire connection terminals often have snap connections of other configurations to prevent unintended disconnection in other contexts. However, as pointed out in the specification of the present invention, in pages 2-3, for example, a connection for a positive temperature coefficient of resistance current limiting assembly (PTCR) must meet size and location restraints not applicable to snap connectors having wires at each end that are used in other contexts. For example, typical snap connectors having wires at each end, can be easily handled and moved around for access for connection and disconnection, with two hands. By contrast, connections for PTCR's mounted *in situ* on equipment must operate in a vibration-prone environment, and yet be easy to assemble *in situ* on the equipment in a crowded location, such mounted on an electric motor at the back of an appliance, usually with one hand, and often only by feel. For these reasons, designs employed by snap connectors having wires at each end do not solve the problems encountered with PTCR's.

Although the present invention is particularly advantageous when used in conjunction with locking electrically isolated plugs, the present invention is not limited to use therewith. As

discussed above, the specification and drawing of the present disclosure describe use of the present invention in conjunction with both locking electrically isolated plugs and nonlocking electrically isolated plugs. In fact, the preamble of Claim 1, as amended, provides that the PTCR of the present invention is "adapted for connecting to both nonlocking-type electrically isolated plugs and lockable-type electrically isolated plugs." This allows the same PTCR be used, for example, as a replacement for an existing PTCR in a piece of equipment that does not have a lockable-type plug and also for a piece of equipment that is designed to use a lockable-type plug. Thus, the present invention minimizes the need to stock multiple kinds of PTCR designs, resulting in a substantial savings.

Accordingly, the prior art of record does not disclose or suggest a PTCR that is "adapted for connecting to both nonlocking-type electrically isolated plugs and lockable-type electrically isolated plugs," that "one of said two sockets having an interior cross-sectional shape that is different from the interior cross-sectional size or shape of the other socket and at least one of said sockets further being asymmetrical to facilitate connection of a cooperatively-shaped electrically isolated plug in only the proper orientation" and that there is "an engageable member disposed on an upstanding wall of at least one of said sockets and outside of said sockets such that it will not interfere with insertion of a single-conductor electrically isolated plug into either of said sockets, the engageable member further being positioned so its middle is disposed generally between lines extending axially through said male terminals when viewed from the side but offset to the side of a line extending between said male terminals when viewed from above, said engageable member further having a lower edge adapted to lockably engage a locking tab of a lockable electrically isolated plug when a lockable electrically isolated plug is inserted into said sockets." Accordingly, as amended, Claim 1 clearly patentably distinguishes over the prior art.

In view of the foregoing, it is apparent that the cited references do not disclose, teach or suggest the unique combination now recited in amended Claim 1. Applicants therefore submit that amended Claim 1 is clearly and precisely distinguishable over the cited reference in a patentable sense, and is therefore allowable over this reference and the remaining references of record. Accordingly, Applicants respectfully request that the rejection of amended Claim 1 under 35 U.S.C. § 103(a) in view of Applicants' Admitted Prior Art in view of Fujita and/or Sumida be withdrawn and that Claim 1 be allowed.

Claims 6 and 22-23 depend on and further limit Claim 1. Hence, for at least the aforementioned reasons, these Claims are submitted to be in condition for allowance. Applicants respectfully request that the rejections of the dependent Claims 6 and 22-23 also be withdrawn.

Applicants have now made an earnest attempt to place this Application in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 1-10 and 22-23.

Please charge the fee of $110.00 for a one month extension of time and any other required fees due (other than issue fees), and credit any overpayment made, in connection with the filing of this paper to Deposit Account No. 50-0605 of CARR LLP.

Should the Examiner deem that any further amendment is desirable to place this

application in condition for allowance, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

CARR LLP

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